

**Notice of Allowability**

Application No.

10/749,289

Examiner

Laura E. Martin

Applicant(s)

GODIL ET AL.

Art Unit

2853

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed on 12/30/2003.
2. ☒ The allowed claim(s) is/are 1-15.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## **DETAILED ACTION**

### ***Allowable Subject Matter***

Claims 1-15 allowed.

The following is an examiner's statement of reasons for allowance:

Prior art does not disclose or suggest "when the calculating indicates that the amount of ink delivered from the reservoir approximates an amount of ink stored therein at the predetermined level and the level detector indicates that the ink in the reservoir remains below the predetermined level thereby indicative of an ink stick jam halting the supplying of power to the heater" in combination with the remaining claim steps as set forth in claims 1-7.

Prior art does not disclose or suggest "when the determined amount falls below a certain level, calculating the amount of ink remaining in the reservoir during the print job by subtracting therefrom the amount of ink used by the print head during the print job; when the calculated amount of ink is determined to be less than a preselected amount for safely completing the print job, halting the print job; affording a preselected time for refilling the reservoir to the certain level by the powering of the heater and upon elapse of the preselected time without the refilling to the certain level, halting the powering of the heater; and, after halting the powering, detecting whether the ink stick jam has occurred" in combination with the remaining claim steps as set forth in claims 8-11.

Prior art does not disclose or suggest "a controller in communication with the heater, reservoir and print head for controlling the supply of ink through the apparatus by halting heater melting upon the detecting of an ink level in the reservoir at a certain

level and after calculating further reservoir depletion from continued printing by the print head with ink from the reservoir while continuing to detect an absence of refilling of the reservoir to the certain level for a preselected period of time, whereby the absence is indicative of the ink stick jam" in combination with the remaining claim elements as set forth in claims 12-15.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Duer et al. is cited for its disclosure of a solid ink printer that detects the level of ink in a reservoir.

Uetsuki et al. is cited for its disclosure of detecting a level of liquid and estimating the an amount of ink consumed based on a number of ink pixels ejected from a printhead.

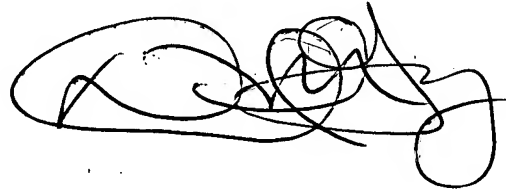
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura E. Martin whose telephone number is (571) 272-2160. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David M. Gray can be reached on (571) 272-2119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura E. Martin

A handwritten signature in black ink, appearing to read 'David Gray', with a large, stylized flourish extending from the end.

David Gray  
Primary Examiner